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PATENT

U.S. Appln. S.N. 10/518,342
AMENDMENTIN THE CLAIMS:

Please add new claims 15-18, and amend claims 1, 4-8 and 11-13, as shown below in the detailed listing of all claims which are, or were in this application:

1. (Currently amended) Crosslinkable silicone composition useful especially as a varnish which has anti-friction properties, said composition comprising at least two organosilicon species A and B which react with one another in the presence of a catalyst C to allow crosslinking, at least one of these two species comprising a polyorganosiloxane (POS), and at least one particulate component D, wherein:

- > this composition is crosslinkable by polyaddition;
- > the particulate component D is selected from the group comprising consisting of powdered ~~(co)polyamides~~ ~~preferably (co)polyamides 6, 12 and 6/12~~ defined (co)polyamides defined as follows:
 - the particles are of substantially rounded shape, and

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- the mean particle diameter Φ_{md} is between 0.1 and 200 μm , ~~preferably between 5 and 100 μm and particularly preferably between 10 and 50 μm ;~~
- it also contains at least one other particulate component E selected from the group comprising consisting of powdered silicas having a mean particle diameter Φ_{md} of about 0.1 μm or less, and a BET specific surface area greater than 50 m^2/g , ~~preferably of between 50 and 400 m^2/g and especially of between 150 and 350 m^2/g .~~

2. (Previously presented) Composition according to claim 1, wherein the particulate component D is present in an amount of 0.1 to 20% w/w, based on the total weight of the composition.

3. (Previously presented) Composition according to claim 1, wherein the particulate component E is present in an amount of 0.001 to 5% w/w, based on the total weight of the composition.

4. (Currently amended) Composition according to claim 1, wherein it comprises:

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- (A) 100 parts by weight of at least one polyorganosiloxane (POS) having at least two alkenyl groups, ~~preferably C₂-C₆ alkenyl groups~~, bonded to the silicon in each molecule;
- (B) 1 to 50 parts by weight of at least one polyorganosiloxane having at least three hydrogen atoms bonded to the silicon in each molecule;
- (C) 0.001 to 1 part by weight of at least one catalyst ~~preferably composed of at least one metal belonging to the platinum group~~;
- (D) 0.1 to 20 parts by weight of at least one particulate component consisting of (co)polyamide;
- (E) 0.001 to 5 parts by weight of at least one siliceous particulate component;
- (F) 0 to 30 parts by weight of at least one adhesion promoter;
- (G) 0 to 1 part by weight of at least one crosslinking inhibitor;
- (H) 0 to 10 parts by weight of at least one polyorganosiloxane resin;

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- (I) optionally at least one functional additive for imparting specific properties.

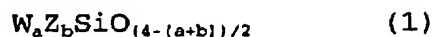
5. (Currently amended) Composition according to ~~claim 1~~ claim 4, wherein the dynamic viscosity η (mPa.s at 25°C) of its silicone phase, consisting of the POS A and B and optionally the components H or I, is such that:

$$200 \leq \eta \leq 3000,$$

preferably ~~300 $\leq \eta \leq$ 2000,~~

and particularly preferably ~~400 $\leq \eta \leq$ 900.~~

6. (Currently amended) Composition according to ~~claim 1~~ claim 4, wherein one or more POS A and the optional resins H have siloxy units of the formula



in which:

- the symbols W, which are identical or different, are each an alkenyl group ~~and preferably a C₂-C₆ alkenyl;~~
- the symbols Z, which are identical or different, are each a non-hydrolyzable monovalent hydrocarbon group that is devoid of an unfavorable action on the activity of the

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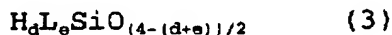
catalyst, is optionally halogenated ~~and is preferably selected from alkyl groups having from 1 to 8 carbon atoms inclusive, and from aryl groups;~~

- a is 1 or 2, b is 0, 1 or 2 and a + b is between 1 and 3;
- optionally at least some of the other units are units of the empirical formula



in which Z is as defined above and c has a value of between 0 and 3.

7. (Currently amended) Composition according to claim 1, wherein one or more POS B have siloxy units of the formula



in which:

- the symbols L, which are identical or different, are each a non-hydrolyzable monovalent hydrocarbon group that is devoid of an unfavorable action on the activity of the catalyst, is optionally halogenated ~~and is preferably selected from alkyl groups having from 1 to 8 carbon atoms inclusive, and from aryl groups;~~

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- d is 1 or 2, e is 0, 1 or 2 and d + e has a value of between 1 and 3;
- optionally at least some of the other units being units of the empirical formula



in which L is as defined above and g has a value of between 0 and 3.

8. (Currently amended) Composition according to ~~claim 1~~ claim 6, wherein the alkenyl groups W of the POS A and the optional POS resins H are vinyl groups Vi carried by siloxy units D and optionally M and/or T.

9. (Previously presented) Varnishing process, in which the composition according to claim 1 is applied, as an anti-friction varnish, to a substrate optionally coated with at least one layer of silicone elastomer.

10. (Previously presented) Process comprising:

- coating a substrate with the composition according to claim 1,

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- crosslinking the layer of varnish, optionally with thermal activation,
- and optionally repeating the above steps at least once.

11. (Currently amended) Process according to claim 9, wherein the varnish composition is applied to the substrate at a coating rate less than or equal to 25 g/m² ~~and preferably between 5 and 20 g/m².~~

12. (Currently amended) Composite obtainable by the process according to claim 9, comprising:

- a substrate,
- optionally a coating firmly fixed to at least one side of the substrate and comprising at least one layer of silicone elastomer,
- at least one layer of varnish based on the composition comprising at least two organosilicon species A and B which react with one another in the presence of a catalyst C to allow crosslinking, at least one of these two species comprising a polyorganosiloxane (POS), and at least one particulate component D, wherein:
 - this composition is crosslinkable by polyaddition;

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- the particulate component D is selected from the group comprising ~~consisting of~~ powdered (co)polyamides preferably (co)polyamides 6, 12 and 6/12 defined (co)polyamides defined as follows:
- the particles are of substantially rounded shape, and
 - the mean particle diameter Φ_{md} is between 0.1 and 200 μm , preferably between 5 and 100 μm and particularly preferably between 10 and 50 μm ;
- it also contains at least one other particulate component E selected from the group comprising ~~consisting of~~ powdered silicas having a mean particle diameter Φ_{md} of about 0.1 μm or less, and a BET specific surface area greater than 50 m^2/g , preferably of between 50 and 400 m^2/g and especially of between 150 and 350 m^2/g .

13. (Currently amended) Composite according to claim 12, wherein the substrate is a flexible substrate ~~preferably selected from the group comprising:~~

~~textiles,~~

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~~non-woven fibrous substrates,~~
~~polymer films, particularly polyester and polyamide.~~

14. (Previously presented) Manufactured article, containing the composite according to claim 12.

15. (New) Composition according to claim 1, wherein the mean particle diameter Φ_{md} of the particulate component D is between 5 and 100 μm .

16. (New) Composition according to claim 5, wherein the dynamic viscosity η (mPa.s at 25°C) of its silicone phase, consisting of the POS A and B and optionally the components H or I, is such that:

$$300 \leq \eta \leq 2000.$$

17. (New) Composition according to claim 4, wherein the catalyst is composed of at least one metal belonging to the platinum group.

18. (New) Composite according to claim 13, wherein said substrate is selected from the group consisting of textiles, non-woven fibrous substrates, polyester films and polyamide films.